

A CHECK LIST OF THE TICKS OF UTAH

LAFE R. EDMUNDS*

University of Utah, Salt Lake City

This paper provides a distributional list of the ticks of Utah, with their hosts. Approximately 650 specimens of ticks have been examined from Utah comprising representatives of 19 of the 21 species listed. Specimens of *Ornithodoros eremicus* Cooley and Kohls^{5†} and *Ixodes diversifossus* Neumann, Stanford¹², previously reported from Utah, were not available for this study.

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In this report the collection records are arranged alphabetically by county. Unless otherwise indicated, all records listed as new are of specimens now in the collection of the University of Utah. In the lists of specimens examined, abbreviations are employed as follows: (U.S.A.C.) Utah State Agricultural College; (R.M.L.) Rocky Mountain Laboratory; (U.S.P.H.S.P.L.) United States Public Health Service Plague Laboratory.

1. *Argas reflexus* (Fabricius).—NEW RECORDS: Uintah County, 3 mi. S. Vernal, July 27, 1948, cliff swallows (C. Greenhall). These specimens were immature forms, and were labeled "probably *reflexus*" at the R.M.L.

2. *Argas persicus* (Oken).—RECORDS FROM LITERATURE: Tooele County, Tooele, Apr. 18, 1934, chickens (G. F. Knowlton), Bishopp and Trembley²; Washington County, "near" St. George, 1936, chickens (E. W. Davis), Cooley and Kohls⁷.—NEW RECORDS: Kane County, 5 mi. NW. Kanab, May 18, 1947, long tailed chat (J. C. Downey); Salt Lake County, 3 mi. E. Salt Lake City, 1948, fox sparrow (R. Selander).

3. *Otobius megnini* (Duges).—RECORDS FROM LITERATURE: The following authors list this tick as occurring in Utah without giving specific collection data: Hunter and Bishopp¹⁰, Bishopp and Trembley², Cooley and Kohls.⁷ NEW RECORDS: Emery County, San Rafael

*Contribution from the Division of Biology, Department of Invertebrate Zoology and Entomology, University of Utah, Salt Lake City, Utah.

†The collection records from the literature are followed by the author's name and a number, referring to the number of the reference in the bibliography. The names placed in parentheses are those of the collectors of the specimens.

Desert, Aug. 16, 1947, calf (B. Moore); San Juan County, Dry Mesa, Oct. 27, 1946, deer (J. Berryman); Sanpete County, Wales, Oct. 19, 1946, deer (D. M. Rees); Washington County, Beaver Dam Wash, May 6, 1941, host unknown (J. Berryman).

4. *Ornithodoros eremicus* Cooley and Kohls.—RECORDS FROM LITERATURE: San Juan County, "near" Bluff, Aug. 24, 1939, *Peromyscus maniculatus*, Cooley and Kohls.⁵

5. *Ornithodoros turicata* (Duges).—RECORDS FROM LITERATURE: San Juan County, "near" Monticello, Aug. 31, 1940, burrow of *Citellus* sp. (R.M.L.), Cooley and Kohls⁷; Washington County, Beaver Dam Slope, 1939, *Gopherus agassizi*, Woodbury and Hardy.¹³

6. *Ornithodoros parkeri* (Cooley).—RECORDS FROM LITERATURE: Collections from Carbon, Emery, Grand, Iron, Uintah, and San Juan Counties reported by Davis.⁹ NEW RECORDS: Washington County, Beaver Dam Slope, Sept., 1939, tortoises (A. M. Woodbury).

7. *Ornithodoros kelleyi* Cooley and Kohls.—RECORDS FROM LITERATURE: Grand County, 4 mi. N Thompsons [sic], July 31, 1940, *Pipestrellus* bats (J. Frenkle), Cooley and Kohls.⁶

8. *Ornithodoros talaje* (Guérin-Méneville).—NEW RECORDS: Kane County, "near" Echo Cliffs, Navajo Indian Reservation, Sept., 1939. Found unattached under a rock (S. and D. Mulaik).

9. *Ixodes sculptus* Neumann.—RECORDS FROM LITERATURE: Rich County, May 20, 1938, *Citellus armatus* (Eskey); Summit County, June 15, 1938, *Citellus armatus* (Eskey); June 13, 1938, *Citellus armatus* (Eskey), Cooley and Kohls.⁸ NEW RECORDS: Cache County, Logan Canyon Forestry Camp, Mar. 23, 1942, *Citellus armatus* (J. S. Stanford), U.S.A.C.; San Juan County, Abajo Mts., 5 mi. W. Monticello, July 5, 1947, pocket gopher (L. R. Edmunds); Dalton Spring, Abajo Mts., 5 mi. W. Monticello, July 5, 1947, pocket gopher (L. R. Edmunds); Gooseberry Ranger Station Elk Ridge, July 14, 1947, pocket gopher (L. R. Edmunds).

10. *Ixodes pacificus* Cooley and Kohls.—RECORDS FROM LITERATURE: Beaver County, Bush Creek, Oct. 20, 1938, human (Thorne); Washington County, "near" Pinto, Oct. 20, 1938, human (D. M. Rees); Bishopp and Tremble.² NEW RECORDS: Millard County, Holden, Oct. 25, 1945, human (D. M. Rees).

11. *Ixodes marmotae* Cooley and Kohls.—RECORDS FROM LITERATURE: Cache County, May 24, 1938, *Citellus armatus* (U.S.P.H. S.P.L.); Rich County, June 3, 1938, *Marmota* sp. (U.S.P.H.S.P.L.), Cooley and Kohls.⁸ NEW RECORDS: Box Elder County, "near" Lampo, July 9, 1942, *Marmota* sp. (J. S. Stanford), U.S.A.C.; Salt Lake County, Prairie Hollow, May 18, 1939, *Marmota* sp. (L. R. Edmunds).

12. *Ixodes kingi* Bishopp.—RECORDS FROM LITERATURE: Grand County, Sept. 1, 1940, prairie dog (R.M.L.); Sept. 2, 1940, prairie dog (R.M.L.); Millard County, Aug. 9, 1940, prairie dog (R.M.L.); Sept. 9, 1940, prairie dog (R.M.L.); San Juan County, May 1, 1937, prairie dog (Haas); Apr. 22, 1937, *Mustela* sp. (Haas); Apr. 21,

1937, *Mustela* sp. (Haas), Cooley and Kohls.⁸ NEW RECORDS: San Juan County, July 4, 1947, prairie dog (L. R. Edmunds).

13. *Ixodes angustus* Neumann.—NEW RECORDS: Cache County, Sardine Canyon, Dec. 28, 1937, weasel (Denning), U.S.A.C.; Camp Hunt, Aug. 14, 1942, shrew (J. S. Stanford), U.S.A.C.; Uintah County, Paradise Park, Aug. 7, 1947, pika (K. R. Kelson).

14. *Ixodes ochotona* Gregson.—NEW RECORDS: Uintah County, Paradise Park, July 31, 1947, pika (G. F. Edmunds, Jr.); July 22, 1947, pika (K. R. Kelson); July 30, 1948, pika (D. M. Rees).

15. *Ixodes spinipalpis* Hadwen and Nuttall.—NEW RECORDS: Uintah County, 1 mi. SE. Ouray, 1946 (J. Berryman), host unknown. These specimens were labeled "probably *spinipalpis*" at the R.M.L.

16. *Ixodes diversifossus* Neumann.—RECORDS FROM LITERATURE: Cache County, "near" Logan, July 28, 1931, cottontail rabbit (J. S. Stanford).

17. *Dermacentor albipictus* Packard.—RECORDS FROM LITERATURE: Bishopp and Trembley², Cooley³, report this tick as occurring in Utah, without giving specific collection data. NEW RECORDS: Cache County, Logan, Feb. 5, 1942, deer (Clamaine); Logan, Oct. 27, 1947, deer (Hobbs), U.S.A.C.; Daggett County, 18 mi. E. Linwood, Mar. 12, 1947, antelope (K. R. Kelson); Garfield County, Panguitch, March, 1948, horse (L. R. Edmunds).

18. *Dermacentor parumapertus* Neumann.—RECORDS FROM LITERATURE: Bishopp and Trembley², Cooley³, show this species on their distribution maps; Juab County, Trout Creek, May 6-8, 1934, jack rabbit (J. S. Stanford), Stanford.¹² NEW RECORDS: Kane County, 2 mi. SW. Kanab, May 20, 1947, jack rabbit (J. C. Downey); 3 mi. S. Kanab, May 23, 1947, jack rabbit (G. K. Todd); Kanab, May 24, 1947, jack rabbit (J. C. Downey); 2 mi. S. Kanab, May 24, 1947, jack rabbit (J. C. Downey); Hamblin Ranch, Cave Lakes Canyon, 5 mi. NE. Kanab, May 18, 1947, cottontail rabbit (G. K. Todd); House Rock, Arizona-Utah border, May 5, 1947, jack rabbit (L. R. Edmunds); San Juan County, 11 mi. N. Bluff, June 28, 1947, jack rabbit (L. R. Edmunds); Tooele County, Rush Valley, Dec. 30, 1947, jack rabbit (I. Bell).

19. *Dermacentor andersoni* Stiles.—RECORDS FROM LITERATURE: Many authors record this species in Utah. NEW RECORD: The most abundant tick in Utah, records are from the following counties: Cache, Davis, Duchesne, Emery, Garfield, Iron, Kane, Millard, Salt Lake, San Juan, Sanpete, Tooele, Utah, Wasatch. Numerous host species were recorded.

20. *Haemaphysalis leporis-palustris* (Packard).—RECORDS FROM LITERATURE: Box Elder County, July 22, 1931, pigmy rabbit (J. S. Stanford), Stanford.¹² Other authors show distribution on maps, Bishopp and Trembley,² and Hunter and Bishopp.¹⁰ NEW RECORDS: Emery County, 4 mi. N. Green River, June 22, 1947, cottontail rabbit (L. R. Edmunds); 4 mi. N. Green River, June 22, 1947, cottontail

rabbit (L. R. Edmunds); Grand County, Valley City, June 23, 1947, cottontail rabbit (L. R. Edmunds); Salt Lake County, Mill Creek Canyon, July 21, 1946, jack rabbit (H. Stark); San Juan County, 18 mi. E. Monticello, July 1, 1947, cottontail rabbit (L. R. Edmunds).

21. *Rhipicephalus sanguineus* (Latreille).—RECORDS FROM LITERATURE: Salt Lake County, Salt Lake City, May 15, 1943, dog (R.M.L.). Kohls and Parker.¹¹ NEW RECORDS: Salt Lake County, Salt Lake City, Oct., 1947, Mexican dog, [sic] (collector unknown).

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